### PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To: Poulin, Gérard BREVATOME NOTIFICATION OF TRANSMITTAL OF 3, rue du Docteur Lancereaux BREVATOME THE INTERNATIONAL PRELIMINARY F-75008 Paris REPORT ON PATENTABILITY **FRANCE** (PCT Rule 71.1) Date of mailing 3. rue du Docteur Lancere lu G(day/month/year) 21.10.2005 Applicant's or agent's file reference IMPORTANT NOTIFICATION B14441.3 ALP International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/EP2004/052446 05.10.2004 14.10.2003 Applicant COMMISSARIAT A L'ENERGIE ATOMIQUE ET AL.

- The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

### 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:



European Patent Office - P.B. 5818 Patentiaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016 **Authorized Officer** 

Viegas da Cruz, I

Tel. +31 70 340-1923



## **PATENT COOPERATION TREATY**

## **PCT**

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference B14441.3 ALP	FOR FURTHER AC	TION	See Form PCT/IPEA/416		
International application No. PCT/EP2004/052446	International filing date ( 05.10.2004	day/month/year)	Priority date (day/month/year) 14.10.2003		
International Patent Classification (IPC) or no A61N1/36	ational classification and IF	C			
Applicant COMMISSARIAT A L'ENERGIE ATOMIQUE ET AL.					
This report is the international pre Authority under Article 35 and train			International Preliminary Examining		
This REPORT consists of a total of 5 sheets, including this cover sheet.					
3. This report is also accompanied b	is report is also accompanied by ANNEXES, comprising:				
a. 🛛 sent to the applicant and to					
sheets of the descripti and/or sheets containing					
			ders contain an amendment that goes ated in item 4 of Box No. I and the		
b. (sent to the International B sequence listing and/or tab Box Relating to Sequence	oles related thereto, in c	omputer readable form	r of electronic carrier(s)) , containing a only, as indicated in the Supplemental nstructions).		
4. This report contains indications re	elating to the following it	ems:			
Box No. I Basis of the opi	nion				
☐ Box No. II Priority					
Box No. III Non-establishm	ent of opinion with rega	rd to novelty, inventive s	step and industrial applicability		
☐ Box No. IV Lack of unity of	invention				
	ment under Article 35(2 ations and explanations		inventive step or industrial ent		
Box No. VI Certain docume	ents cited				
☐ Box No. VII Certain defects	in the international appl	ication			
☐ Box No. VIII Certain observa	ations on the internation	al application			
Date of submission of the demand		Date of completion of this	s report		
02.07.2005		21.10.2005			
Name and mailing address of the internation preliminary examining authority:		Authorized Officer	grillettes Polances. C.		
European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Loveniers, K					
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Telephone No. ±31.70.34	10.8983		



# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2004/052446

	Box No. I Basis of the repor	IAPZUREC'A PUTAPPO 1 A ADD 2006	
1.		is report is based on the international application in the language in which it wa	
	☐ This report is based on tran which is the language of a t	islations from the original language into the following language, translation furnished for the purposes of:	
	<ul><li>☐ international search (und</li><li>☐ publication of the international preliminary</li></ul>	der Rules 12.3 and 23.1(b)) ational application (under Rule 12.4) examination (under Rules 55.2 and <i>l</i> or 55.3)	
2.	With regard to the <b>elements*</b> of have been furnished to the recereport as "originally filed" and an	the international application, this report is based on (replacement sheets which eiving Office in response to an invitation under Article 14 are referred to in this re not annexed to this report):	
	Description, Pages		
	1-27	as originally filed	
	Claims, Numbers		
	1-22	received on 02.07.2005 with letter of 24.06.2005	
	Drawings, Sheets		
	1/10-10/10	as originally filed	
	☐ a sequence listing and/or a	ny related table(s) - see Supplemental Box Relating to Sequence Listing	
3.	☐ The amendments have res	ulted in the cancellation of:	
	☐ the description, pages☐ the claims, Nos.		
	☐ the drawings, sheets/fig		
	☐ the sequence listing <i>(sp</i> ☐ any table(s) related to s		
4.	☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).		
	<ul><li>the description, pages</li><li>the claims, Nos.</li><li>the drawings, sheets/fig.</li></ul>		
	<ul><li>☐ the sequence listing (sp</li><li>☐ any table(s) related to s</li></ul>		
	* If item 4 applies, s	ome or all of these sheets may be marked "superseded."	

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2004/052446

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-22

No:

Claims

Inventive step (IS)

Yes: Claims

mc

No: Claims

1-22

Industrial applicability (IA)

Yes: Claims

1-22

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

PCT/EP2004/052446

#### Re Item V.

1 The following documents are referred to in this communication:

D1: US 2002/077670 A1 (ARCHER STEPHEN T ET AL) 20 June 2002 (2002-06-

20)

D2: US 2003/125786 A1 (FOWLER BRAD ET AL) 3 July 2003 (2003-07-03)

### 2 INDEPENDENT CLAIM 1

2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

A cerebral electrostimulation device (see par. 15) containing at least one commutation device (see fig. 13) comprising

- switching means (312);
- at least one input (310) and several outputs each connected to at least one biocompatible electrode (314) or at least one active area of a biocompatible electrode, the commutation device being used to selectively connect at least one input to one or more outputs (see par. 86).

The subject-matter of claim 1 therefore differs from this known electrostimulation device in that the switching means comprises electromechanical bistable switches included in a microelectromechanical system.

The problem to be solved by the present invention may therefore be regarded as how to consume less energy in a switching system (see application's description, p. 5, lines 2-5). This solution is however widely known to a person skilled in the art of switches, hence rendering it obvious to the skilled man to apply such electromechanical bistable switches in the microstimulator of D1, thereby arriving at a microstimulator according to claim 1.

2.2 For the sake of completeness, it is pointed out that also when he starts from document D2 (see figs. 8, 22; par. 111, last but one sentence; and par. 126), the skilled person would choose the well-known feature of the electromechanical bistables without the exercise of inventive skill, in order to solve the problem posed.

### 3 INDEPENDENT CLAIM 16

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 16 does not involve an inventive step in the sense of Article 33(3) PCT, for the same reasons as mentioned in par. 2 of the present communication, mutatis mutandis.

### 4 DEPENDENT CLAIMS 2-15, 17-22

Dependent claims 2-15, 17-22 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step (Article 33(3) PCT):

- claim 2: see D1, par. 126, last sentence
- claim 3: see D1, par. 126: "external programmer"
- claims 4, 5: see D1, par. 126
- claim 6: see D2, par. 112, last sentence
- claims 7, 8: see D1, fig. 22, (636); or see D2, fig. 8, (810)
- claims 9, 10: see D2, par. 111
- claim 11: see D1, par. 86, first sentence
- claims 12, 17: see D1, fig. 22, (622, 624)
- claims 13, 18: see D1, par. 85, last sentence
- claims 14, 19: see D1, fig. 13, (316, 418, 338)
- claim 15: see D1, fig. 22, (622)
- claim 20: see D1, par. 2: implantable neurostimulator
- claims 21, 22: see D1, par. 86, first sentence